IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

RONDEVOO TECHNOLOGIES, LLC,)
Plaintiff,))) Case No. 19-680-RGA
v.)
AERNOS, INC.,)
Defendant.)

RONDEVOO TECHNOLOGIES, LLC OPPOSITION TO AERNOS' MOTION TO DISMISS FOR FAILURE TO STATE A CLAIM

George Pazuniak (DE Bar 478) O'Kelly Ernst & Joyce, LLC 901 N. Market St. Suite 1000 Wilmington, DE 19801 Tel: 302-478-4230

Email: GP@del-iplaw.com

Todd Y. Brandt BRANDT LAW FIRM 222 N. Fredonia Street Longview, Texas 75606 Telephone: (903) 212-3130 Facsimile: (903) 753-6761 tbrandt@thebrandtlawfirm.com

Attorneys for Plaintiff Rondevoo Technologies, LLC

TABLE OF CONTENTS

I. N	NATURE OF THE PROCEEDINGS1 -
II. I	NTRODUCTION AND FACTUAL BACKGROUND1 -
III. (CLAIMS AT ISSUE3 -
IV.	SUMMARY OF RONDEVOO'S ARGUMENT5 -
V. A	ARGUMENT 7 -
A.	Legal Standards7 -
1	. Rule 12(b)(6) Jurisprudence Requires Dismissal of Aernos' Motion 7 -
B. De	THE TWO-STEP SECTION 101 MAYO/ALICE ANALYSIS ENDS AT STEP ONE FOR RONDEVOO'S VICE CLAIMS. ————————————————————————————————————
C. Ani	THE ASSERTED CLAIMS ARE PATENT ELIGIBLE UNDER 35 U.S.C. § 101 AS MACHINES D/OR ARTICLES OF MANUFACTURE
D.	THE ASSERTED CLAIMS PASS STEP TWO OF THE MAYO/ALICE ANALYSIS 9 -
E. Cla	THE ASSERTED PATENTS' SPECIFICATION DISCLOSES SPECIFIC EMBODIMENTS THAT ARIFY THE CLAIMED ELEMENTS 10 -
F.	THE ASSERTED CLAIMS ARE NOT DIRECTED TO A METHOD OR IDEA OF SENSING 12 -
G. Lim	THE CLAIMED DEVICES RELY ON SIGNIFICANT, MATERIAL, AND NON-GENERIC 13 -
	AERNOS' CITATIONS TO § 101 CASELAW ARE INAPPOSITE – EVERY CASE AERNOS CITES LY CONSIDERS METHOD CLAIMS, NOT DEVICE CLAIMS. ————————————————————————————————————
I. 15 -	AERNOS IMPROPERLY DEEMS CLAIM TERMS ABSTRACT WITHOUT ANY CONSTRUCTION
J.	THE ASSERTED PATENT'S DEPENDENT CLAIMS ARE PATENT ELIGIBLE 15 -
	In the Alternative, Rondevoo Should Be Afforded Leave to File an Amended mplaint Under <i>Aatrix</i> to Provide a More Detailed Basis for Finding Patent gibility at the Pleading Stage
VI.	CONCLUSION 16 -

TABLE OF AUTHORITIES

CASES

Aatrix Software, Inc. v. Green Shades Software, Inc., 882 F.3d 1121 (Fed. Cir. 2018)	passim
Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S, 134 S.Ct. 2347 (2014)8 -, - 9	-, - 12 -, - 14 -
Ariosa Diagnostocs, Inc. v. Sequenom, 788 F.3d 1371 (Fed Cir. 2015)	12 -
Arthur v. Maersk, Inc., 434 F.3d 196 (3d Cir. 2006)	16 -
BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341 (Fed. Cir. 2016)7	-, - 13 -, - 14 -
Baxter Int'l, Inc. v. CareFusion Corp., 2016 WL 2770787 (N.D. Ill. 2016)	10 -
Bilski v. Kappos, 561 U.S. 593 (2010)	7 -
Canrig Drilling Tech., Ltd. v. Trinidad Drilling, LP, 2015 WL 5458576 (S.D. Tex. 2015)	8 -
Cellspin Soft, Inc. v. Fitbit Inc., 927 F.3d 1306 (Fed. Cir. 2019)	11 -
ChargePoint, Inc. v. SemaConnect, Inc. 920 F.3d. 759 (Fed. Cir. 2019)	12 -
Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc., 880 F.3d 1356 (Fed. Cir. 2018)	12 -
Diamond v. Chakrabarty, 447 U.S. 303 (1980)	7 -
Digitech Image Techs., LLC v. Elecs. for Imaging, Inc., 758 F.3d 1344 (Fed. Cir. 2014)	8 -
Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350 (Fed. Cir. 2016)	9 -
Enfish, LLC v. Microsoft Corp., 822 F.3d 1327 (Fed. Cir. 2016)	
Genetic Techs, Ltd v. Merial LLC, 818 F.3d 1369 (Fed. Cir. 2016)	
Immersion Corp. v. Fitbit, Inc., 313 F.Supp 3d 1005 (N.D. Cal. 2018)	

Ironworks Patents, LLC v. Apple Inc., 2018 WL 2944475 (D. Del., 2018)	8 -
Mayo Collaborative Services v. Prometheus Laboratories, Inc., 132 S.Ct. 1289 (2012)	8 -, - 9 -, - 14 -
McRO, Inc. v. Bandai Namco Games Am. Inc., 837 F.3d 1299 (Fed. Cir. 2016)	12 -, - 14 -
MyMail, Ltd. v. ooVoo, LLC, F.3d, 2019 WL 3850614 at *4 (Fed. Cir. 2019)	15 -
Polaris Innovations Ltd. v. Kingston Tech. Co., 223 F. Supp. 3d 1026 (C.D. Cal. 2016)	10 -, - 14 -
POWERbahn, LLC v. Found. Fitness LLC, 2016 WL 4318978 (D. Nev. 2016)	10 -
Shane v. Fauver, 213 F.3d 113 (3d Cir.2000)	16 -
Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709 (Fed. Cir. 2014)	8 -, - 9 -, - 14 -
Umland v. Planco Fin. Servs., 542 F.3d 59 (3d Cir. 2008)	7 -
Visual Memory LLC v. NVIDIA Corp., 867 F.3d 1253 (Fed.Cir. 2017)	7 -
STATUTES	
35 U.S.C. § 101	passim
35 U.S.C. § 103	3 -
RULES	
Fed. R.Civ.P. Rule 12(b)(6)	2 -, - 3 -, - 7 -, - 16 -
Fed.R.Civ.P. Rule 15(a)(2)	16 -

I. NATURE OF THE PROCEEDINGS

Plaintiff Rondevoo Technologies, LLC ("Rondevoo") hereby opposes the Motion to Dismiss for Failure to State a Claim to Defendant Aernos Inc. ("Aernos") (D.I. 8) (the "Motion"). Rondevoo's Complaint identifies claim 1 of Patent 9,453,814 (the "814 Patent") and Claim 19 of Patent 9,927,391 (the "391 Patent," and collectively the "Asserted Patents") through the creation, sale, and/or use of at least Aernos' infringing AerloT device. (D.I. 1).

II. INTRODUCTION AND FACTUAL BACKGROUND

Aernos moves to dismiss Rondevoo's Complaint under a misguided premise. The Asserted Patents do not claim an abstract idea. The claimed inventions are devices – physical, tangible things comprised of defined layers formed into three-dimensional structures. The claimed devices specifically detect the presence of a medium and the concentrations of analytes and require changes to an array of sensors' separate electrical and physical properties for detection. The limited nature of the physical devices claimed means the use or creation of other kinds of sensors are not constrained by the Asserted Patents. It is a mischaracterization to argue that the Asserted Patents claim the abstract idea of "sensing," or preempt "all applications in all fields due to patenting abstract concepts" when the claimed devices exclude sensors that do not have the claimed configuration (e.g. volumetric flow sensors). See (D.I. 8 at p. 9).

Claiming the abstract idea of "sensing" as Aernos alleges, would require method or process claims directed to the broad idea of a sensing activity. That is not what is happening here as the claims are narrower. For example, a simple pH meter for "sensing" hydrogen-ion activity can be made with two hand-held electrodes, an amplifier, and a display capable of showing the measure voltage across the electrodes when in contact with a sample. This simple exemplary pH meter device is not what is claimed here, as the asserted claims require additional physical features such

as a complex layered structure with an embedded nano-scale sensor array capable of detecting changes in both its electrical and physical parameters. However, if Aernos' misguided arguments are believed, the abstract idea of "sensing" by using our example pH meter would fall under the scope of the asserted claims, as a voltage change would be detected by the presence of a gas/liquid/chemical/biological object between the handheld electrodes. This makes no sense. Thus, the asserted claims are not intangible or abstract, and do not preempt the entirety of nano-scale sensing technologies. The asserted claims have a defined concrete existence with specific structures that are not generic.

The claimed devices have defined features (e.g. a layered three-dimensional structure, a matrix film, a nano sensor array, an upper metallic layer, etc.), that must allow for changes in both electrical characteristics and physical parameters of the claimed arrays. This is articulated with factual detail within the Complaint, and thus – more fundamentally – Defendant's motion here fails under the standard for review for Fed. R.Civ.P. Rule 12(b)(6). Rondevoo's infringement claim charts are not predicated on the practice of a method, a naturally occurring phenomenon, a law of nature, a mathematical formula, a software process, a thought exercise, or any abstract idea. Aernos makes and sells at least one device bearing the physical characteristics of the Asserted Patents' claimed devices. (D.I. 1). The Complaint includes well-plead facts showing how the innovative features of the claimed devices are exhibited by Aernos' devices, and thus that the asserted claims are directed to tangible things with unique structures, rather than abstract ideas or processes. (D.I. 1, US Patent No. 9,453,814 and US Patent No. 9,927,391). Assumed as true – as required under a Rule 12(b)(6) analysis – these well-plead factual allegations put Aernos on notice that the asserted claims relate to unique tangible devices, and that at least their AerloT device infringes the asserted claims.

Aernos asserts that because the claimed devices have elements which Aernos argues are commonplace, that the claims are directed to an abstract idea. This is an incomplete invalidity challenge under 35 U.S.C. § 103, rather than the correct application of *Alice* on of the narrow issue of patent eligibility under 35 U.S.C. § 101. This is also without the Court ever construing claim terms that Aernos seeks to delimit as exemplifying mere abstract concepts. Aernos' Motion fails for its improper premise that physical devices are abstract, and for the incorrect application of Rule 12(b)(6) to a factually-supported and well-plead Complaint. Aernos' Motion should be denied.

III. CLAIMS AT ISSUE

Independent claims 1, 19 and 20 of the '814 Patent are reproduced below:

Claim 1	Claim 19	Claim 20
A device, comprising:	A device, comprising:	An electronic device, comprising:
an upper metallic layer,	an upper metallic layer	a first layer fabricated in silicon using semiconductor fabrication techniques;
a lower layer	a lower layer, and	a second layer formed next to the first layer to provide data storage,
a nano sensor array positioned between the upper and lower layers to detect a presence of a gas, a chemical, or a biological object, wherein each sensor's electrical characteristic changes when encountering the gas, chemical or biological object, and	a resistive, optical or magnetic nano sensor positioned between the upper and lower layers wherein nanoparticles form a conduction path between the upper and lower layers, and a matrix film on the nanoparticles, wherein a physical parameter of the matrix film changes to measure gas or liquid concentration.	the second layer having a lower layer formed next to the first layer; a resistive sensor element; and an upper layer formed next to the resistive element, wherein resistance changes when encountering a gas, a chemical, or a biological object, and

a matrix film on the nano	a matrix film on the	a matrix film on the second
sensor array wherein a	nanoparticles, wherein a	layer wherein a physical
physical parameter of the	physical parameter of the	parameter of the matrix film
matrix film changes to	matrix film changes to	changes to measure gas or
measure gas or liquid	measure gas or liquid	liquid concentration.
concentration.	concentration.	

Of the '814 Patent's three independent claims, only Claim 1 is asserted against Aernos in this action.

As to the '391 Patent, independent claims 1, 19 and 20 of are reproduced below:

Claim 1	Claim 19	Claim 20
A device, comprising:	A device, comprising:	An electronic device, comprising:
an upper layer,	an upper metallic layer,	a first layer fabricated in silicon using semiconductor fabrication techniques;
a lower layer, and	a lower layer, and	a second layer formed on the first layer
a nano sensor array are vertically aligned, and the nano sensor array positioned between the upper and lower layers	a nano sensor positioned between the upper metallic layer and the lower layer, wherein the upper metallic layer, the lower layer, and the nano sensor are vertically aligned,	a nano sensor array formed on the second layer; and an upper layer formed on the nano sensor array, wherein the first layer, the second layer, the nano sensor array, and the upper layer are vertically aligned,
to detect a presence of a liquid, gas, chemical, or biological object, wherein the nano sensor array's electrical characteristic changes when encountering the liquid and wherein a physical parameter of the nano sensor array changes to measure a quantity or a presence of the liquid, gas, chemical, or biological object concentration.	wherein the nano sensor comprises a physical parameter that changes to measure liquid, gas, chemical, or biological object concentration.	wherein the nano sensor array's property changes when encountering a liquid, gas, chemical, or biological object.

Claim 19 of the '391 Patent is asserted against Aernos in this action.

Claim 1 of the '814 Patent and Claim 19 of the '391 Patent are not representative of one another. Claim 1 of the '814 Patent includes a "matrix film," a sensor "array," and the requirement that the "array" alter both its electrical and physical properties, which are not found in Claim 19 of the '391 Patent. Claim 1 also includes a functional limitation, "to detect," and then further limits the claim to a particular structure of performing that function: a nano sensor array positioned between the upper and lower layers wherein each sensor's electrical characteristic changes when encountering the gas, chemical or biological object. Claim 19 includes the distinct requirement that the upper layer, lower layer, and nano sensor are aligned vertically. The two asserted claims are similar in that they relate to tangible devices with unique constraints, and do not contain process or method steps exhibiting the bare act of "sensing."

IV. SUMMARY OF RONDEVOO'S ARGUMENT

The asserted claims are directed to distinct physical devices, not ineligible subject matter under 35 U.S.C. § 101. The asserted claims constitute new and useful machines and/or articles of manufacture, and include patentably-distinct physical elements and parameters that stand as improvements over cited prior art. Aernos wrongly contends that the claims are directed to the abstract method "of a sensor alerting the presence of a gas, chemical, or biological agent" and that therefore the Asserted Patents are not directed to patent eligible subject matter. *See generally* (D.I. 8 at 8). This is an incomplete and erroneous mischaracterization that entirely disregards the claim language.

First, the asserted claims are each directed to a distinct "device" having layers and nanoscale sensor arrays, in which the arrays alter both their electrical and physical characteristics to detect both a presence of a liquid, gas, chemical, or biological agent, and the agent's

concentration, respectively. There is no claim to an end result of using the devices (the act of "sensing" by itself), but rather an improved sensing device that relies on non-generic components (multi-dimensional sensor arrays, matrix film, etc.), specific construction (layered and aligned design), defined sizing (nano-scale sensing array), and multiple variable detection parameters (electrical and physical) to detect something.

Second, the claims are not directed to an action or process ("...a sensor <u>alerting...</u>") but rather the structure and characteristics of physical devices themselves. There are no method or process claims in either of the Asserted Patents, and none of the asserted device claims rely on process steps. There is no requirement that any of the claimed devices issue an "alert" or carry out the process of detection that they are designed to do. The Asserted Patents do not claim a method of sensing – they claim tangible devices.

Third, the Motion makes several erroneous contentions making it ripe for denial. Contrary to arguments presented, the Complaint presents well-plead facts articulating the concrete nature of the claimed physical devices, and their comparative relation to the features found in Aernos' infringing physical device. A claimed physical device's alleged ubiquity or range of applications has nothing to do with eligibility when the invention's patentable distinction rests on its physical components and design. Patent ineligibility requires the claimed subject matter be an intangible concept without something more, meaning that the claims preempt intangible concepts themselves. The claims here cannot preempt concepts or ideas. Finally, Aernos fails to secure even a preliminary claim construction in advance of arguing against patent eligibility under § 101. These missteps are each fatal for Aernos' Motion.

For these reasons, Aernos' Motion should be denied.

V. ARGUMENT

A. Legal Standards

1. Rule 12(b)(6) Jurisprudence Requires Dismissal of Aernos' Motion

When considering a Rule 12(b)(6) motion to dismiss, the court must accept as true all factual allegations in the complaint and view them in the light most favorable to the plaintiff. *See Umland v. Planco Fin. Servs.*, 542 F.3d 59, 64 (3d Cir. 2008).

Additionally, on "a motion to dismiss under Rule 12(b)(6), [] all factual inferences drawn from the [asserted patent's] specification must be weighed in favor of [] the non-moving party." *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1261-62 (Fed.Cir. 2017). "[P]lausible factual allegations may preclude dismissing a case under § 101 where, for example, 'nothing on th[e] record . . . refutes those allegations as a matter of law or justifies dismissal under Rule 12(b)(6)." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018) (citing *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016); *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016)).

As in *Aatrix*, plausible factual allegations here (the claims in the Asserted Patents attached to the Complaint) show that the asserted claims are each directed to a tangible "device" that does not exhibit a method or process – this cannot be refuted. *See Aatrix*, 882 F.3d at 1126, n. 1 (holding that the district court erred in finding ineligibility for tangible subject matter). This simple fact alone compels denial of Aernos' Motion.

B. The Two-Step Section 101 Mayo/Alice Analysis Ends at Step One for Rondevoo's Device Claims.

Patent eligible subject matter under § 101 includes "any new and useful ... machine [or article of] manufacture...." 35 U.S.C. §101; see also Bilski v. Kappos, 561 U.S. 593 (2010); Diamond v. Chakrabarty, 447 U.S. 303, 308 (1980). Under the two-step Mayo/Alice patent

eligibility test, "[a] § 101 analysis begins by identifying whether an invention fits within one of the four statutorily provided categories of patent-eligible subject matter." *Aatrix*, 882 F.3d at 1125 (citing *Ultramercial*, *Inc. v. Hulu*, *LLC*, 772 F.3d 709, 713-14 (Fed. Cir. 2014); *Digitech Image Techs.*, *LLC v. Elecs. for Imaging*, *Inc.*, 758 F.3d 1344, 1348-50 (Fed. Cir. 2014)); *see also Mayo Collaborative Servs. v. Prometheus Labs.*, *Inc.*, 132 S. Ct 1289, 2355 (2012); *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct 2347, 1289, 1294 (2014). If the claims are directed to a tangible machine or article of manufacture, then the *Mayo/Alice* analysis ends in finding the claims patent eligible under §101. *See Aatrix*, 882 F.3d at 1126; *Ultramercial*, 772 F.3d at 715 (explaining that if the patent's subject matter has a "concrete or tangible application," it is not a patent-ineligible abstract idea); *Ironworks Patents*, *LLC v. Apple Inc.*, 2018 WL 2944475 (D. Del., 2018); *Immersion Corp. v. Fitbit*, *Inc.*, 313 F.Supp 3d 1005 (N.D. Cal. 2018) ("other district courts ... have rejected 101 challenges where the claims are directed to a physical device"); *Canrig Drilling Tech.*, *Ltd. v. Trinidad Drilling*, *LP*, 2015 WL 5458576 (S.D. Tex. 2015). Since the asserted claims are each directed to a physical "device", the Court's *Mayo/Alice* analysis must stop here.

However, if the claims were directed to a patent ineligible concept or intangible idea, the Court would then "examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 573 U.S. ____, 134 S.Ct. 2347, 2357 (2014). Even if the claims recited an abstract idea, they are still patent eligible if they have "additional features to ensure that the claim is more than drafted to monopolize the abstract idea." Id. (citing Mayo Collaborative Services v. Prometheus Laboratories, Inc., 132 S.Ct. 1289, 1297 (2012)). The limitations must be considered both individually and as an ordered combination in this step. Id. at 2355. The two steps are "plainly related" and "involve overlapping scrutiny of the content of

the claims." Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1353 (Fed. Cir. 2016).

C. The Asserted Claims are Patent Eligible Under 35 U.S.C. § 101 as Machines and/or Articles of Manufacture.

The asserted claims are directed to tangible "devices," and thus patent-eligible under the first step of the § 101 Mayo/Alice analysis. See Aatrix, 882 F.3d at 1126; Ultramercial, 772 F.3d at 715 (explaining that if the patent's subject matter has a "concrete or tangible application," it is not a patent-ineligible abstract idea); Ironworks Patents, supra; Immersion Corp., 313 F.Supp 3d at 1024 ("other district courts .. have rejected 101 challenges where the claims are directed to a physical device"). Contrary to Aernos' arguments, taking the facts pled in the Complaint as true, the asserted claims do not recite an abstract idea, a process, or even a method of "sensing."

D. The Asserted Claims Pass Step Two of the Mayo/Alice Analysis.

Contrary to Aernos' unfounded arguments, the claimed devices do not preempt the use of "all other sensors, thereby not claiming the "abstract idea" of sensing. The claimed devices have defined features (e.g. a layered three-dimensional structure, a matrix film, a nano sensor array, an upper metallic layer, etc.), that must allow for changes in both electrical characteristics and physical parameters of the claimed arrays. The layering composition is also concrete and tangible, and specifically requires a unique manufacturing technique that requires consideration of sensor array exposure to analytes and thus management of molecular interactions at very small scales. Further, the claim limitations "upper metallic layer", "lower layer", "nano sensor array", and "matrix film" in claim 1 of the '814 Patent restrains the composition of the sensor to a tripartite "sandwich" structure having a unique functionality and unique subsets of conductive compounds that they can be created from.

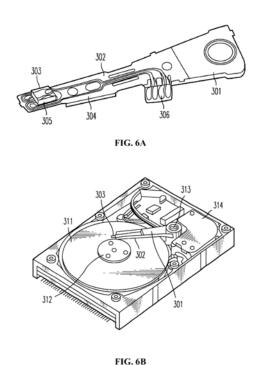
The claims relate to tangible devices, and the claimed structural and functional elements taken in combination preclude any finding that the claims cover a mere abstract idea. Claimed

devices are not mere abstract ideas or subject to § 101 challenges even if the claims incorporate an abstract idea as part of its operation. *See POWERbahn, LLC v. Found. Fitness LLC*, 2016 WL 4318978 at *3 (D. Nev. 2016) ("While it is true that the claim includes a formula, the claim is clearly directed at a piece of exercise equipment, and the formula is simply one part of the overall scheme. Including a law of nature as one part of a claim does not transform the entire scheme into an abstract idea."); *Polaris Innovations Ltd. v. Kingston Tech. Co.*, 223 F. Supp. 3d 1026, 1034 (C.D. Cal. 2016) (noting that the defendant had not "cited any case where a court found that a claim for a purportedly novel physical configuration of a piece of computer hardware was deemed patent-ineligible because it was merely the embodiment of an abstract process" and distinguishing cases involving "patented *processes* running on what the courts found to be generic hardware"); *Baxter Int'l, Inc. v. CareFusion Corp.*, 2016 WL 2770787 at *12 (N.D. Ill. 2016) (declining defendant's invitation to ignore physical components of a claimed invention that were known in the prior art and instead considering the patent as a whole).

The claims incorporate physical elements into tangible devices, and thus combine to form more than a mere patent ineligible concept or idea. Aernos' Motion should be denied.

E. The Asserted Patents' Specification Discloses Specific Embodiments That Clarify the Claimed Elements.

The specification of each Asserted Patents describes embodiments related to Nano Chemical Sensors. (D.I. 1-1 and -2, and particularly '391 Patent Col. 23 ln 41-Col 29, ln 7). *See also* Figures 6A and 6B of the '814 Patent:



The Asserted Patents are thus similar to the patent considered in *Cellspin Soft, Inc. v. Fitbit Inc.*, 927 F.3d 1306 (Fed. Cir. 2019). The Court in *Cellspin Soft* held that the claims of the patent were patent eligible under § 101, because they provided an inventive way of way of arranging devices and using certain protocols. *Id.* at 1319. Following this rationale, the Asserted Patents disclose tangible embodiments, and claim tangible devices having specific components configured to perform functions in unique ways (requiring changing two parameters on a sensor array to allow for operation). Aernos mischaracterizes the claims as pertaining to an abstract idea. This strays too far from the weight of the claims.

Since all factual inferences drawn from the specification must be weighed in Rondevoo's favor, and the claims are directed to the arguably unconventional inventive concepts more fully described in the specification, Aernos' § 101 Motion should be denied. *See Berkheimer*, 881 F.3d at 1370.

F. The Asserted Claims are Not Directed to a Method or Idea of Sensing

The Federal Circuit has cautioned against describing claims in a way that is untethered to the claim language. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016) (*citing Alice*, 134 S.Ct. at 2354); *also McRO*, *Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016); *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361-62 (Fed. Cir. 2018). Aernos' unfounded assertion of an abstract idea is not tied to the claim language. The claims contain no processes or methods, and instead each claim a tangible "device."

Defendant cites to *Ariosa Diagnostics, Inc. v. Sequenom,* 788 F.3d 1371, 1376 (Fed Cir. 2015) for the proposition that claims directed to a method of detecting the presence of cell free fetal DNA in material plasma for making a certain diagnosis covered ineligible subject matter such as laws of nature and natural phenomenon. In *Ariosa*, the method at issue amounted to a general instruction to doctors to apply routine, conventional techniques when seeking to detect cffDNA. Because the method steps were well-understood, conventional and routine, the method of detecting paternally inherited cffDNA was not new useful. *Id* at 1377. That is far different from the claim limitations in this case. The claims here are tangible devices – not methods. As stated above, claim 1 is limited to a device with an "upper metallic layer," "a lower layer," "a nano sensor array," and a "matrix film" – none of which are methods, processes, ideas, concepts, laws of nature, or natural phenomenon.

Aernos tries to tie the asserted claims to the rationale set forth in *ChargePoint, Inc. v.*SemaConnect, Inc. 920 F.3d. 759 (Fed. Cir. 2019). However, ChargePoint is distinguishable, in that the Federal Circuit found invalidity, because the claims were directed to the abstract method of remotely controlling electrical charging stations. Importantly, the ChargePoint Court indicated that the patent was not patent eligible for identifying only an abstract idea as the problem facing the inventor, without providing significant meaningful limitations on the hardware to overcome

the problem. *Id.* at 774-775. The facts here are distinguishable, because the Asserted Patents claim a physical, tangible sensing device. Contrary to *ChargePoint*, a device is not an abstract idea facing the inventor.

Finally, Defendant also relies on *Genetic Techs, Ltd v. Merial LLC*, 818 F.3d 1369, 1376 (Fed. Cir. 2016) to argue that the asserted device claims relate to an abstract method and concept. The Court in *Genetic Techs* found that a method claim for detecting a location on a chromosome based on "a newly discovered fact about human biology" was unpatentable where the patent did not "identify any novel coding detection techniques." *Id.* As with Aernos' other case citations, this case is completely inapposite to the facts at hand. As stated above, the claims are directed to devices. Furthermore, the claimed sensing devices exclude the use of other differently-designed sensors, thereby not claiming the abstract idea of "sensing," or preempting the existence of sensors at all. Aernos' Motion should be denied.

G. The Claimed Devices Rely on Significant, Material, and Non-Generic Limitations

Aernos' arguments that the asserted claims do not provide any improvements are merely *ipsi dixit* contradicting the patents' specifications. Facts in the specifications must be accorded deference at this pleading stage, and, thus, Aernos' arguments here are insufficient. *See Aatrix*, 882 F.3d at 1130-1331. Even an argument that the claims only discuss conventional items is insufficient. "[A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." *Bascom*, 827 F.3d at 1350. As discussed in the Asserted Patents specifications, these claimed limitations are not conventional, particularly in the way they are combined in each claim to improve detection. When claims contain limitations "directed to the arguably unconventional inventive concept described in the specification," the specification supports improved functionality. *Berkheimer*, 881 F.3d at 1370. Thus the asserted claims' limitations, considered both individually and as distinct ordered combinations,

significantly narrow the claim scope from the realm of "abstract idea" and present something more that is patent eligible at least under step two of Mayo/Alice analysis. *Bascom*, 827 F.3d at 1350, 1352; *McRO*, 837 F.3d at 1315.

The claims therefore do not merely recite the alleged abstract idea "along with the requirement to perform it on the internet, or to perform it on a set of generic computer components." *Bascom*, 827 F.3d at 1350. "Nor do the claims preempt all ways" of "providing targeted advertising to a user" or providing a customized user page with an advertisement. *See id.*; *also McRO*, 837 F.3d at 1315. Thus, Aernos' motion should be denied.

H. Aernos' Citations to § 101 Caselaw are Inapposite – Every Case Aernos Cites Only Considers Method Claims, Not Device Claims.

Every case cited by Aernos in support of its arguments dealt with method claims, not device claims. In reviewing more applicable device-related caselaw, section 101 jurisprudence favors Rondevoo's contention that it's asserted device claims are patentable machines and/or articles of manufacture, and thus patent-eligible under 35 U.S.C. § 101. See Aatrix, 882 F.3d at 1126 (finding error in district court's holding that a tangible system was patent ineligible); Ultramercial, 772 F.3d at 715 (explaining that if the patent's subject matter has a "concrete or tangible application," it is not a patent-ineligible abstract idea); Ironworks Patents, LLC v. Apple Inc., Case No. 17-cv-1399-RGA, 2018 WL 2944475 (D. Del., June 12, 2018); Immersion Corp. v. Fitbit, Inc., 313 F. Supp 3d 1005, 1024 (N.D. Cal. Mar. 5, 2018) ("other district courts ... have rejected 101 challenges where the claims are directed to a physical device"); POWERbahn, 2016 at *3 (D. Nev. Aug. 11, 2016) ("While it is true that the claim includes a formula, the claim is clearly directed at a piece of exercise equipment...."); Polaris, 223 F. Supp. 3d at 1034.

The asserted patents are directed to tangible devices. (See '814 and '391 Patents). There is no claim made to a method or process, and thus no preemption of an idea for or way of

"sensing." Aernos' citation to method-claim caselaw does not apply to the claims here. Under applicable § 101 caselaw, Aernos' Motion should be denied.

I. Aernos Improperly Deems Claim Terms Abstract Without Any Construction.

"Determining patent eligibility requires a full understanding of the basic character of the claimed subject matter" and "if the parties raise a claim construction dispute at the Rule 12(c) stage, the district court must either adopt the non-moving party's constructions or resolve the dispute to whatever extent is needed to conduct the § 101 analysis." *MyMail, Ltd. v. ooVoo, LLC*, __F.3d____, 2019 WL 3850614 at *4 (Fed. Cir. 2019).

Here, Aernos has asserted that the "claimed advance of Claim 1 is the abstract idea of a sensor alerting the presence of a gas, chemical, or biological object." (p. 9). This argument overlooks all the structural and functional limitations, but also creates a claim construction dispute as to the scope of the claim limitations. Those disputes must be resolved in Plaintiff's favor at this stage of the proceedings.

J. The Asserted Patent's Dependent Claims are Patent Eligible

Aernos makes weak arguments disputing the eligibility of the Asserted Patent's dependent claims. Aernos vaguely describes the claims, and then again incorrectly concludes first that there is an abstract idea at issue, and then that the claimed dependent limitations do not transform the (nonexistent) abstract method of "sensing" into patent eligible subject matter. (D.I. 8 at 19). Aernos' conclusory arguments are founded on the same incorrect premise that the asserted claims somehow relate to a method or process, despite specifically claiming a physical device with a unique structure. Aernos' arguments necessarily fail, and its Motion again should be denied.

K. In the Alternative, Rondevoo Should Be Afforded Leave to File an Amended Complaint Under *Aatrix* to Provide a More Detailed Basis for Finding Patent Eligibility at the Pleading Stage.

Should the Court not recognize that the asserted claims are directed to a patent-eligible category, or that the combination of elements renders each claim patent-eligible, Rondevoo would respectfully request leave to amend its complaint to better-articulate the facts supporting the Asserted Patents' eligibility.

A district court should freely give leave to amend a complaint "when justice so requires." Fed.R.Civ.P. Rule 15(a)(2). "Leave to amend must generally be granted unless equitable considerations render it otherwise unjust." *Arthur v. Maersk, Inc.*, 434 F.3d 196, 204 (3d Cir. 2006). "[U]ndue delay, bad faith, and futility" are factors justifying denial of leave to amend. *See id.* Amendment is futile when "the complaint, as amended, would fail to state a claim upon which relief could be granted." *Shane v. Fauver*, 213 F.3d 113, 115 (3d Cir.2000).

Although determination of patent eligibility under § 101 is a question of law, fact questions must be resolved to make an ultimate legal determination. *See Aatrix*, 882 F.3d at 1128 (finding district court erred in denying amendment where the patentee made factual allegations that if accepted as true justified amendment). As with all determinations made under the onus of Rule 12(b)(6), such fact questions must be assessed in a light most favorable to the non-moving party.

VI. CONCLUSION

For the foregoing reasons, Plaintiff Rondevoo Licensing, LLC respectfully requests that this Court deny Defendant Aernos Inc.'s Motion to Dismiss.

Respectfully Submitted,

Dated: September 3, 2019

Of Counsel:

Todd Brandt Brandt Law Firm 222 N. Fredonia Street Longview, TX 75601 Tel: 903 753 6760 tbrandt@thebrandtlawfirm.com /s/ George Pazuniak

George Pazuniak (DE Bar 478) O'KELLY, ERNST & JOYCE LLC 901 North Market Street, Suite 1000 Wilmington, DE 19801 Phone: (302) 478-4230 Fax: (302) 295-2873 gp@del-iplaw.com

Attorneys for Plaintiff

.